

Best Practices in Children's Mental Health:

A Series of Reports Summarizing the Empirical Research on Selected Topics

Report #7 **“Adventure Based Therapy and Outdoor Behavioral Healthcare”** **May, 2003**

Produced by the University of Kansas
School of Social Welfare
Twente Hall
Lawrence, KS
In conjunction with
Kansas Social Rehabilitation Services

Authors: Tara Swaim LSCSW

Project Coordinator: Chris Petr, Ph.D., LSCSW

Report #1 – October 2001, “Inpatient Treatment for Children and Adolescents”
Report #2 – November 2001, “Inpatient Treatment for Adolescent Substance Abusers”
Report #3 – February 2002, “Group Care for Children and Adolescents”
Report #4 – December 2002, “Outcome Studies of Children and Adolescents with Autism”
Report #5 – February 2003, “Family Centered Home Based Models for Treatment Prevention”
Report #6 – April 2003, “Children and Adolescents with Asperger Syndrome”

Adventure Based Therapy and Outdoor Behavioral Healthcare

INTRODUCTION

Treatment approaches that are based on experiential learning and incorporate adventure or challenge components have recently received increasing attention and interest from behavioral healthcare providers. This treatment modality knows many names: Adventure Programming, Outdoor Behavioral Healthcare, Adventure Therapy, Adventure-Based Therapy, Therapeutic Camping, Wilderness Therapy, and Adventure Based Counseling, to name a few. The one dynamic that unites the different nomenclature is the idea that psychotherapeutic interventions can move beyond the traditional office setting and utilize the inherent value of personal challenge and environments unfamiliar to the client. An implicit, though yet undocumented, proposition is that these experiential interventions are also more effective than traditional approaches in achieving client outcomes.

These unfamiliar and challenging environments can range from a secluded camp in the Rocky Mountains, to a ropes course at an inpatient psychiatric facility, to one or more hours of focused therapeutic challenge for outpatients. Regardless of the exact definition of the "unfamiliar environment", the participants are challenged in a safe but novel way that facilitates self-empowerment, a heightened understanding of personal responsibility, as well as insight into the ways in which they are connected to and contribute toward the well-being of people around them.

Because this genre of treatment is very broad and is not yet clearly and consistently defined in the literature, Adventure-Based Therapy (ABT) and Outdoor Behavioral Healthcare (OBH), two modalities that have been written about most extensively, are defined, differentiated, and discussed. Additionally, ABT is examined within the context of Children's Community Based Service (CBS) providers' interest in beginning or expanding ABT programs in the state of Kansas. A survey of Kansas CMHC Children's CBS Directors use of ABT and/or OBH is summarized and included in this report as an appendix. Finally, the use of ABT with families is addressed.

ABT and OBH are discussed within the context of the following:

- Framework and definitions
- History
- Goals/characteristics/populations served
- Research base
- Reimbursement
- Examination of use of these modalities in Kansas
- Use of ABT with families
- Recommendations for enhancement of ABT programming with Kansas families
- Recommendations for enhancement of ABT and OBH programming in Kansas

FRAMEWORK AND DEFINITIONS

Miles & Priest (1999) outline four categories within which all adventure programs can be placed: recreational, educational, developmental, or therapeutic. These delineations are conceptualized in reference to whether they change the way people feel, think, or behave. Recreational programs alter the way participants feel and are designed to be entertaining. Educational programs are designed to enhance awareness and understanding of skills such as teamwork or effective communication. Developmental programs are designed to improve functioning to a level beyond that of educational programs. Finally, therapeutic adventure programs are designed to alter dysfunctional or destructive behavior. This last category is the focus of this discussion.

Miles & Priest (1999) use the work of Gass (1993) to further categorize therapeutic programs. Gass (1993) observes that **three types of therapeutic programs exist** and are categorized by location, duration, and type of programming:

- Adventure-Based Therapy (ABT),
- Wilderness Therapy, and
- Long-Term Residential Camping.

ABT sessions are usually one to several hours in length and are conducted at or near the therapeutic facility. This approach is often used as one component of either in-patient or out-patient treatment plans. Sessions center on group work, using team games, problem solving initiatives, and sometimes low and high-challenge ropes courses.

Wilderness therapy is conducted in a remote setting and is based upon Outward Bound ideology, which will be discussed in the “History” section of this report. These programs can be short or long term, ranging in length from seven to thirty-one days. They usually incorporate some type of expedition format and emphasize the teaching and practicing of wilderness skills. This type of format is utilized with groups with various presenting issues, including SED populations. Finally, **Long-Term Residential Camping** is conducted at a facility designed for that purpose and can last up to one year or longer. It is conceptualized as an alternative to residential placement for youth with significant emotional or behavioral problems.

Outdoor Behavioral Healthcare (OBH) can be included in either Wilderness Therapy or Long-Term Residential Camping, depending upon the type of facility and duration of treatment (K. Russell, personal communication, February 4, 2003). The defining component of OBH is that the program can be categorized in one of these two groups and is necessarily a licensed therapeutic provider, eligible for third-party insurance reimbursement. It is important to note that not all Wilderness Therapy or Long-Term Residential Camping programs can be categorized as OBH, but all OBH programs can be considered Wilderness Therapy or Long-Term Residential Camping programs. As previously mentioned, because OBH has been well conceptualized and more clearly operationalized, it, together with ABT, is the focus of this report. Thus, from this point forward, Wilderness Therapy and Long-Term Residential Camping will not be specifically cited, and OBH will be.

Finally, it is important to clearly distinguish between ABT/OBH and what has been referred to in the media as "bootcamps". Adjudicated wilderness programs began to take shape in the 1970's as an alternative to traditional interventions, including incarceration, for juvenile offenders. Some of these programs are often referred to as "bootcamps" because of a strict disciplinary approach in a very controlled environment. They are mentioned specifically as an example of what ABT and OBH programs for mental health populations are NOT. It is not uncommon for OBH and ABT programs to be confused with "bootcamps", when, in fact, they are very different in structure and theoretical orientation. While there are adjudicated OBH programs and adjudicated treatment programs that utilize ABT, the atmosphere in these programs is defined by support and guidance, not humiliation and mental cruelty, as is often the situation in "bootcamps".

HISTORY OF OBH AND ABT

Although OBH and ABT share a common history and set of influences, distinctions between the two that began in the early 1970's have become more clearly defined in the past decade. The roots of OBH and ABT can be traced to Camp Ahmek, founded in Canada in 1929, a program that took a "therapeutic" approach to camping and activities in environments new to the participants. Within the context of this "therapeutic" approach were the explicitly stated goals of camper recuperation and socialization. Specifically, this camp stressed the importance of living and working in small groups, with the idea that it was within small groups that appropriate behavior would be socialized into the participants (Russell & Hendee, 2000). It is important to note that this camp was not designed for psychiatric or behaviorally disturbed populations.

Camp Ahmek contributed to the creation of the Dallas Salesmanship Club, founded in 1946 by Campbell Loughmiller. According to Russell & Hendee (2000), "Loughmiller believed that the outdoors contained real threats and natural consequences that helped teach the campers personal and social responsibility. He believed these lessons would impart a sense of control to the campers, which would help them transfer changes made in the camp environment to their everyday lives." This dynamic continues to be a cornerstone of many OBH and ABT programs operating presently.

Perhaps one of the most well-known and popularly recognized influences on present day OBH and ABT programming is Outward Bound, a program that incorporates wilderness challenge and "rites-of-passage" (Schoel & Maizell, 2002; Russell & Hendee, 2000). Outward Bound was brought to the United States in the 1960's by German educator Kurt Hahn, who stressed overcoming self-perceived limitations with the use of wilderness challenge and "solos" or "rites-of-passage", a process in which the participant leaves all but the most basic possessions and spends time alone, reflecting on his/her self, his/her character, relationships, past behavior, and future goals.

In the early 1970's, a more clear differentiation between ABT and OBH began to develop. One of the most extensively developed off-shoots of Outward Bound is Project Adventure (PA). Based in Covington, Georgia, PA was founded in 1971 by Jerry Pieh

who helped his father start the Minnesota Outward Bound School. Early in the 1970's, Pieh wrote a proposal to the federal Office of Education to bring the ideology of Outward Bound to a traditional school setting. The project was funded in 1971 and was named Project Adventure (Schoel & Maizell, 2002).

In the past three decades, PA has become a nation-wide treatment, education, and consulting organization, offering a large array of services under the umbrella of "Adventure-Based Counseling". PA programming includes both consultation services for groups interested in utilizing PA techniques and ideology, as well as in-patient and out-patient treatment programs at PA facilities. Groups served and issues addressed include corporate team building, violence prevention, residential treatment, and adventure experiences for SED and other youth.

In contrast to the development of ABT, the continued evolution of OBH is seen in primitive skills programs, sponsored by the Department of Youth Leadership at Brigham Young University, that came into existence in the late 1960's. The first course involved students being dropped off in the desert with minimal food and water, with 26 days to hike to a pre-determined meeting point. These courses, designed for college freshmen who were in danger of academic failure, were developed by Larry Olsen and Doug Nelson. Ezikel Sanchez, one of the first program participants, joined Olsen and Nelson in their work and has become an integral part of the organization. The original program was adapted for use with adolescents and is currently in use at the Aspen Achievement Academy and Anasazi Foundation, two prominent OBH programs (Russell & Hendee, 2000).

One of the most important developments that occurred to promote the uniqueness, legitimacy, and professionalism of OBH programs, as well as to improve accessibility their services, is recognition by insurance companies and state agencies. In the late 1980's, Anasazi founders Larry Olsen and Ezikel Sanchez sought out insurance companies for the purpose of third party reimbursement. It was agreed that if Anasazi could meet state requirements for adolescent residential treatment, Anasazi and similar OBH programs would be recognized and, more importantly, reimbursed. Standards created by Olsen and Sanchez continue to guide reimbursement practices. These "Mobile Program Agency Standards" include: 1) development of an individual treatment plan for each client, 2) regular medical checks, 3) appropriate backup communication procedures, and 4) minimum caloric intake for participants (Russell & Hendee, 2000).

While ABT and OBH took different developmental paths at times, a common emphasis towards professionalism for ABT and OBH programs and facilitators was seen in the 1970's when the Therapeutic Adventure Professional Group (TAPG) was formed. According to Russell and Hendee (2000), "TAPG is a special interest group of the Association of Experiential Education (AEE) committed to enhancing the development of adventure-based programming and the principles of experiential education in therapeutic settings." TAPG was formed by professionals from healthcare, mental health, education, and corrections to more clearly conceptualize and operationalize what was meant by "adventure-based education".

The group created a text, "Adventure Therapy: Therapeutic Applications of Adventure Programming" (Gass, 1993) that articulated seven principles that have helped to guide the development of ABT and OBH. These principles include the use of: 1) action-centered therapy, 2) unfamiliar environment to overcome resistance, 3) a constructive use of stress within the context of developing problem solving skills, 4) therapist assessment/evaluation of the client in a "real" environment, 5) small group development and socialization, 6) focus on success rather than dysfunction, and 7) change in client perception of "therapist" (Gass, 1993).

EXPECTED TREATMENT OUTCOMES/POPULATIONS SERVED

Gillis and Ringer (1999) cite common goals of therapeutic adventure programs, including ABT and OBH. These goals may include: resocialization, decreased criminal offending, treatment of substance abuse, remedy of dysfunctional interaction with others, and improving clients' management of their own social/emotional lives. ABT has been used increasingly with SED populations during the past few years, as can be observed in the work of Project Adventure. Gillis and Ringer (1999), however, cite a paucity of research and poor conceptualization of guiding ideology in reference to ABT.

Expected treatment outcomes of OBH and populations served by this modality are much more well-defined. Russell and Hendee (2000) completed an extensive literature review in reference to expected outcomes of OBH and summarize them as follows: 1) development of self-concept, 2) enhanced awareness of the impacts of past behaviors, 3) learned knowledge and skill, and 4) strengthening of family/community relations.

There are two components to the development of self-concept that are relatively specific to OBH. These include improved physical well-being through proper diet and physical activity, and empowerment via the successful completion of challenging physical tasks (i.e. rappelling, hiking, kayaking), a dynamic that ideally provides a source of psychological resiliency beyond the actual time spent in treatment.

In OBH, enhanced awareness of impacts of past behaviors is encouraged through the complete removal of the child from the environment in which he/she is struggling, thus facilitating a level of objectivity that cannot be attained in many traditional psychotherapeutic settings. Additionally, the primitive nature of many OBH programs often enables adolescents to develop an appreciation for positive aspects of their lives that had not been previously acknowledged, much less appreciated. In other words, many clients come to the realization that they "don't have it that bad at home", a conclusion that can be a very powerful impetus in gaining objectivity and awareness in reference to past choices and behaviors, as well as future choices.

According to Russell and Hendee (2000), strengthened family and community relations are two of the paramount goals of OBH. Families/guardians are incorporated in differing ways depending upon the structure and purpose of the program, though it is generally agreed that children are not accepted if parents/guardians refuse to participate.

Generally, family involvement is restricted to before and/or after the expedition, in which only youth and staff participate. Parental/guardian participation in classes emphasizing parenting skills and improved family communications and coping skills are frequently the focus of involvement.

When discussing typical OBH client profiles, it is helpful to first delineate between private placement and adjudicated programs. Because of the varying histories and purposes of these types of programs, clients served by these programs respectively possess differing characteristics and needs. Russell and Hendee (2000) report that adolescents served by private placement programs are 83% male/17% female, aged 13-17, and are not typically from low-income environments. These clients are generally resistant to traditional outpatient psychotherapy, and have a history of academic problems, substance abuse issues, and defiance of authority figures. It is important to note that these children usually have not experienced serious legal difficulties, nor have they been removed from the home of their parent(s)/guardian. Conversely, adjudicated clients are usually adolescent males coming from low-income homes, have experienced significant encounters with law enforcement, and have frequently experienced removal from the home of their parent(s)/guardian.

Russell and Hendee (2000) completed an extensive survey of 86 OBH programs and outlined diagnoses that are most commonly accepted by these types of programs. Low self-esteem, ADHD, Oppositional Defiant Disorder, Depression, Conduct Disorder, and Anxiety are all presenting problems accepted by at least 90% of surveyed programs. Clients with Schizophrenia are accepted by only 8% of OBH programs, sexual abuse perpetrators by only 37%, adolescents with eating disorders by 53%, and clients with a history of violence by 54% of OBH programs. It can be hypothesized that these types of presenting problems require an extremely high level of monitoring and/or medical supervision and thus are more difficult to treat in an OBH setting. It can also be assumed that these dynamics contribute to client screening for "goodness of fit" between OBH program and presenting problem.

RESEARCH BASE

Gillis and Ringer (1999) summarize many of the problems currently facing adventure therapy research: authors not clearly indicating population being served, presenting problem, or outcome and need for "cleaner" standardization of nomenclature. They also discuss the increasing problem of how "programs that are primarily based on challenge ropes courses or using only group initiatives are combined in the literature with programs that are primarily wilderness based"(p. 34). In addition to these difficulties, there exist few clearly designed studies that include follow-up.

Gilliam (1993) completed one of the few studies on the use of a ropes course in a psychotherapeutic setting and as an ABT tool. The study consisted of data collection through interviews and observations at five psychiatric hospitals. Gilliam suggests that the ropes courses at all five facilities were accepted as a valuable treatment strategy, although she does not explain what is meant by "valuable treatment strategy" and by

whom this observation is made. The results of the study revolved around ways to increase acceptance and support of the use of ropes courses and the need to better and more clearly conceptualize the ways in which the courses should be used as a treatment tool.

Russell and Hendee (2000) completed an extensive literature review that examined outcomes related to OBH programs specific to self-concept, social skills, recidivism, and substance abuse. While the studies specific to these areas were generally positive and supported further study of OBH programs, several methodological problems were of concern. The authors acknowledge that it is difficult to compare studies across settings because the broad category of Wilderness Experience Programs has been defined in various ways, with OBH only recently having been saliently conceptualized. The fact that few OBH programs conduct effectiveness evaluations and those that are done typically involve a very small number of subjects with no control group, only compounds this problem.

Perhaps the largest and most methodologically sound study completed to this point was undertaken by Russell (2001). 858 OBH participants in 8 OBH programs were assessed between May 2000 and December 2000. The group was 69% male, 75% were between ages 16-18, 38% were diagnosed with a mood disorder, and 30% with a substance abuse/dependence disorder. Average length of treatment was 38 days. Client self-report and parental assessment were collected pre and post treatment.

The author was forthcoming with the limitations of the study, which include a lack of control group, no random assignment, and no follow-up. Despite this, the author reports that "participation in OBH programs led to a statistically significant reduction in the severity of behavioral and emotional disorders, as perceived by the clients, and even more so by their parents." Perhaps the most significant research endeavor that must be undertaken is that which will examine the long term impacts of OBH.

REIMBURSEMENT

Project Adventure's founding ideology was based in the bringing of adventure programming and ABT to settings such as schools, residential treatment facilities, and psychiatric hospitals. While PA presently has a residential treatment facility and other "in-house" programs, a large portion of the work done by this agency involves placing ABT within the framework of other programs. For this reason, much of PA's reimbursement comes through the schools, hospitals, and juvenile justice agencies that contract for their services, and not through private pay or third party reimbursement (Beth Fritz, personal communication, February 24, 2003).

As mentioned previously, recognition by insurance companies and state agencies has been a key component to increasing the legitimacy and accessibility of OBH programs. There is an inherent relationship between accreditation and reimbursement, in that accreditation by agencies such as The Council on Accreditation (COA) and The Joint Council on Accreditation of Healthcare Organizations (JCAHO) increases credibility of

OBH programs and, consequently, increases the likelihood that insurance companies will reimburse for this type of treatment. In their study of 86 OBH programs, Russell and Hendee (2000) found that 31% and 57% of adjudicated and private programs, respectively, are nationally accredited. These authors also found that 31% of adjudicated and 70% of private programs receive some form payment from the patient's parent or guardian or their insurance. Despite gains in this area, additional work is needed to improve accessibility and third party reimbursement.

In this same study, it was found that 88% of adjudicated programs and 84% of private placements were licensed by state agencies. It is important to note that no one state agency licenses OBH programs. Depending upon program type, Departments of Juvenile Justice, Social Service, Corrections, Youth/Family Services, or Education can be involved in this process.

SURVEY OF KANSAS CHILDREN'S CBS DIRECTORS

During November 2002, a survey of Kansas Community Mental Health Centers was conducted in order to clarify if OBH/ABT programming was being utilized in Children's Programs and, if so, in what manner. Additionally, recommendations regarding support the State could provide to the programs were gathered. A summary of the findings is outlined below. A more complete outline of survey findings is included in the appendix.

Twenty-one of the twenty-seven Kansas CMHC Children's Directors responded to the phone survey. Eleven of the twenty-one are currently conducting some type of ABT programming. It is important to note that not all of the programs fit exactly within the definition of ABT, as challenge components may not be included but the use of an outdoor/unfamiliar environment is, and the "spirit" of this type of programming seems to be present. While the 10 day therapeutic camping program conducted by Area Mental Health comes closest to fitting the OBH model, because it is not reimbursed as a residential treatment program, it does not truly fit the definition of this model.

Three centers (Pawnee at Concordia, Pawnee at Manhattan, Franklin County) facilitate 2-3 day camping programs, with the Pawnee program involving horse-back riding. Seven centers utilize a one day ropes course (Four County, Prairie View, Kanza, Pawnee at Manhattan, Horizons, Pawnee at Concordia, Family Life Center) and two utilize "adventure-based games" (Iroquois Center for Human Development and Family Life Center). Pawnee has constructed their own low ropes and challenge course with the guidance and consultation of St. Francis Academy of Salina. Horizons does not have their own facility, but utilizes the St. Francis -Salina ropes course facility. Prairie View has constructed their own course and utilize their own staff.

Interestingly, only one respondent expressed no interest in implementing or expanding this type of treatment approach. There was an overwhelmingly positive response to the ABT concept and recommendations from the respondents are included in the appendix. In summary, the recommendation that was voiced most frequently was for the provision

of training and equipment to facilitate the development and/or expansion of ABT programs.

While not within the Kansas CMHC system, the St. Francis ropes and challenge courses were mentioned by several CBS providers and this indicated the need for further examination of this program. St. Francis Academy has two ropes and challenge courses, one at Salina and one at Atchison. The ropes/challenge courses have developed over the past 15 years to the point that the Salina facility not only serves the children who are in residential treatment there, but also 7,000 to 8,000 people annually from the community. The Atchison facility also serves 3,000 to 4,000 people annually, in addition to its residential youth. These people from the community include youth groups, church groups, corporate groups foster care families, school groups, and groups from CMHCs.

Wildwood Outdoor Education Center in LaCyne, Kansas was also contacted. Wildwood has been in existence since 1980 and has both low and high ropes courses. While none of the responding CMHCs indicated use of this facility, it was reported by Robin Cooper-Cornejo, Executive Director of Wildwood, that this facility has been utilized by Bert Nash, Johnson County Mental Health, Miami County Mental Health, and Wyandot County Mental Health. Ms. Cooper-Cornejo indicated that billing usually occurs through the CMHC via psycho-social group.

USE OF ABT WITH FAMILIES

There are a limited number of studies that examine the use of ABT with families and there is no recorded use of OBH with families (Bandoroff & Sherer, 1994; Clapp & Rudolph, 1993). While there is minimal research and theory providing a foundation for this treatment approach, there is a promising program facilitated by Area Mental Health in Ulysses, Kansas that applies ABT to family treatment. The Area Mental Health Wilderness Family Camp Program began in 1992 and since that time has served approximately 450 family members. Camps take place in the Spring and Fall (May and October, respectively) at the Spanish Peaks Boy Scout Ranch in Walsenburg, Colorado. Each camp lasts three days (Saturday through Monday) and includes four to six families.

This program is based upon ABT and Family Structural Analysis, a form of Structural Family Therapy. The goals of the camp are to improve relationships within the internal family structure and between the family and external dynamics. This treatment experience is appropriate for single parent families, married couples with children, as well as unmarried couples. Presently, after ten years of qualitative success, AMHC is seeking funding to expand services and implement a quantitative evaluation process for this program.

SUMMARY AND RECOMMENDATIONS

While the research base and treatment framework for OBH and ABT are still in the developmental stages, these modalities appear to offer a promising treatment approach. Both treatment approaches share a common history, expected outcomes, and serve

similar populations, but differ in duration, location, and reimbursement. ABT can be utilized as a short-term component of an outpatient or inpatient treatment plan to facilitate personal empowerment and an increased sense of responsibility for self and others. It usually occurs at the treatment facility. This type of utilization generally dictates ABT is reimbursed by the agency/organization that made the referral for treatment (JJA, for example) or is reimbursed through CBS funding. OBH is longer in duration, ranging from weeks to months and usually occurs at a camp site or wilderness facility specifically designed for that purpose. Additionally, OBH programs are licensed therapeutic providers.

As previously mentioned, the overwhelming majority of CBS directors in Kansas expressed a desire for development and enhancement of this type of programming. Specifically, they requested money for training and equipment in order to provide ABT at their own facilities. While this may be a viable long-term goal, it seems that CMHCs in Kansas could utilize facilities and programs at St. Francis while the option of developing programs at individual CMHCs is explored. Only two CMHCs are currently utilizing the St. Francis programming.

The Salina and Atchison St. Francis programs have adventure based programs that are one day in length and specifically designed for at-risk youth. These programs incorporate both high elements and low elements that facilitate trust building, group building, and personal challenge. The cost is only \$20.00 per person for a full day and \$10.00 per person for one-half day. St. Francis has also trained personnel and constructed ABT facilities for Pawnee Mental Health and Washburn Rural School District. This "training the trainers" may be a service that could be pursued to extend ABT opportunities to SED children across the state.

The Wilderness Family Camp Program at Area Mental Health Center in Ulysses, Kansas is deserving of evaluation. Such a study could contribute significantly to the literature and research base for ABT and provide support for expansion of ABT programming from the individual youth to the youth's family.

CONTACT INFORMATION

Project Adventure – www.pa.org
Beth Fritz - bfritz@pa.org
(978) 524-4619

OBH Programming – www.wilderness-programs.org

St. Francis – Jim Dubois – jimd@st-francis.org
(866) 999-1599

Wildwood Outdoor Education Center – Robin Cooper-Cornejo
www.wildwoodctr.org

(913) 757-4500

REFERENCES

Bandoroff, S & Scherer, D.G. (1994). Wilderness family therapy: An innovative treatment approach for problem youth. *Journal of Child and Family Studies*, 3(2), 175-191.

Clapp, C.L & Rudolph, S.M. (1993). Building family teams: An adventure-based approach to enrichment and intervention. In Gass, M. (Ed.), *Adventure Therapy: Therapeutic Applications of Adventure Programming* (pp 111-121). Boulder, CO: Association for Experiential Education.

Gass, M. (1993). *Adventure Therapy: Therapeutic Applications of Adventure Programming*. Boulder, CO: Association for Experiential Education.

Gilliam, N. (1993). What happens when ropes courses move from the woods to psychiatric facilities? In Gass, M. (Ed.), *Adventure Therapy: Therapeutic Applications of Adventure Programming* (pp 209-216). Boulder, CO: Association for Experiential Education.

Gillis, H.L. & Ringer, T.M. (1999). Adventure as therapy. In Miles, J.C. & Priest, S. (Eds.) *Adventure Programming* (pp 29-35). State College, PA: Venture Publishing, Inc.

Miles, J.C. & Priest, S. (1999). *Adventure Programming*. State College, PA: Venture Publishing, Inc.

Russell, K.C. & Hendee, J.C. (2000). Outdoor behavioral healthcare: Definitions, common practices, expected outcomes, and a nationwide survey of programs. Technical Report #26, Moscow, Idaho. Idaho Forest, Wildlife and Range Experiment Station. 87 pp.

Russell, K.C. (2001). Assessment of treatment outcomes in outdoor behavioral healthcare. Technical Report #27, Moscow, Idaho. Idaho Forest, Wildlife and Range Experiment Station. 38 pp.

Schoel J. & Maizell, R.S. (2002). *Exploring Islands of Healing: New Perspectives on Adventure Based Counseling*. Beverly, MA: Project Adventure, Inc.

